Design Specification for

~~“History of Personal Computing”~~

~~“Personal Computing Concierge Lounge”~~

“Future of Technology in Education”

A Community of Practice

*Rod Gallagher, Jennifer Jesu-Anter, Kurt Laudicina, AJ Lemheney, Daryl Tate*

**Purpose:**

The communities stated purpose is to build and share artifacts and knowledge concerning the future of technology use in education. The conversation may include past or present technologies as a basis for creating a shared understanding towards a future design or implementation. Artifacts may be any kind of digital media used to represent a discrete topic, area of interest, thing, or concept. For example an artifact may be a graphic picture of a thing, like a piece of hardware, a photograph of a setting or mockup situation. Diagrams may be used to illustrate interaction, process flow or decision making. Knowledge may be represented as text, audio, video or links that are used to explain and describe an artifact or concept. The target audiences are educators and those with interests in the process of teaching and learning.

**Community participation based on:**

Community is fostered through the connections formed by interaction of the participants in building a body of knowledge. An initial set of content will be loaded to illustrate and set example for the community to initiate. Examples of conversations are listed below. All content and conversation will be linked to the user profile so it is clear who contributors are.

….ask the oracle, ask Jeeves idea of participation – this will provide the concierge portion of the community. We can call it whatever we want and feel fits the overall context of our design. It will be monitored by experts (us) who will provide response/advice. It will be organized according to the main topics within the collection. This is private consulting, although a Q/A combination may be re-posted to the discussion. (how it actually works depends on what tech we can find that will support a monitored discussion thread)

….discussion threads OR wiki – these will be embedded w/in each collection however oriented to open discussion among members of the community about the futures they envision. Questions/answers from the oracle may get promoted or moved into the discussions or remain private. The discussion threads /wiki will be open to the entire community to view and participate in. It will be moderated by experts but participation is open to anyone.

**Content:**

Ten – twelve objects that represent the specific knowledge areas of interest in educational uses of technology; listed below are the basis for the objects/artifacts in our collection. I think for the most part these still capture and represent all our original interests. Interesting point Linda threw on the table was to intermix one or two bloopers, like “artificial intel”, even with sophisticated programming, self-awareness like kurzweil singularity prediction remains highly unlikely. But, its fun, like reading about theories of the mind as a standing quantum wave front (WTF?), but it sounds cool! Someone else recently mentioned to me, what about all those promises from the 60’s and 70’s; where is my antigravity pack, the transporter, etc.? a good way to hook in someone into the discussion….

Here is the list I created:

1. Artificial intelligence
2. Augmented reality
3. Mobile computing
4. Game based
5. Gesture based interface
6. Data visualization
7. Learner metrics and analytics
8. Social media
9. Cloud computing
10. Robotics
11. Personal agents

**Collection is based on:**

* ….the futures of educational technology
* Technology Platform design concept: Postcard viewer as the home page / landing page (http://simpleviewer.net/postcardviewer/app/)
* hyper link from the landing page to wikipages
* Collection = Future of personal computing technologies in various educations settings; the collection will be initiated by the experts/site owners however the collection will be modified/influenced by the community
* Community / participation = narrative discussion threads topic specific; “what do you think the future holds”, “how do you see tech being used”

**Design concept**

* Purpose, content, context, community, and interactions
* Post card idea (pictures that represent content in that collection)
* The landing page will arrange images as Collections representing each of the above knowledge areas
* Once you select an image, enter that collection
* Within each collection with be knowledge artifacts and text/narratives relevant for that sub-collection
* a link from each collection to “the oracle” or “the concierge”
* The oracle will be (advice, forum, discussion threads?)

Here are the sites we created during our meeting:

1. [www.futureofedtech.webatu.com](http://www.futureofedtech.webatu.com)
2. [www.wikispaces.com](http://www.wikispaces.com) (userID edtechwiki /PW edtechwiki)
3. <http://futureofedtech.wikispaces.com/>
4. <http://futureofedtech.wikidot.com/>

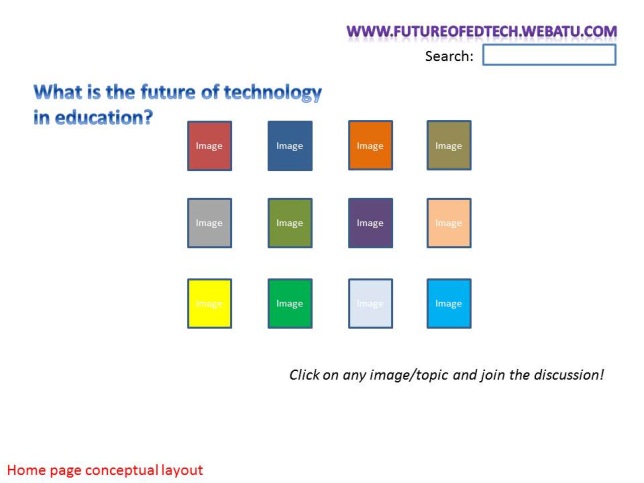
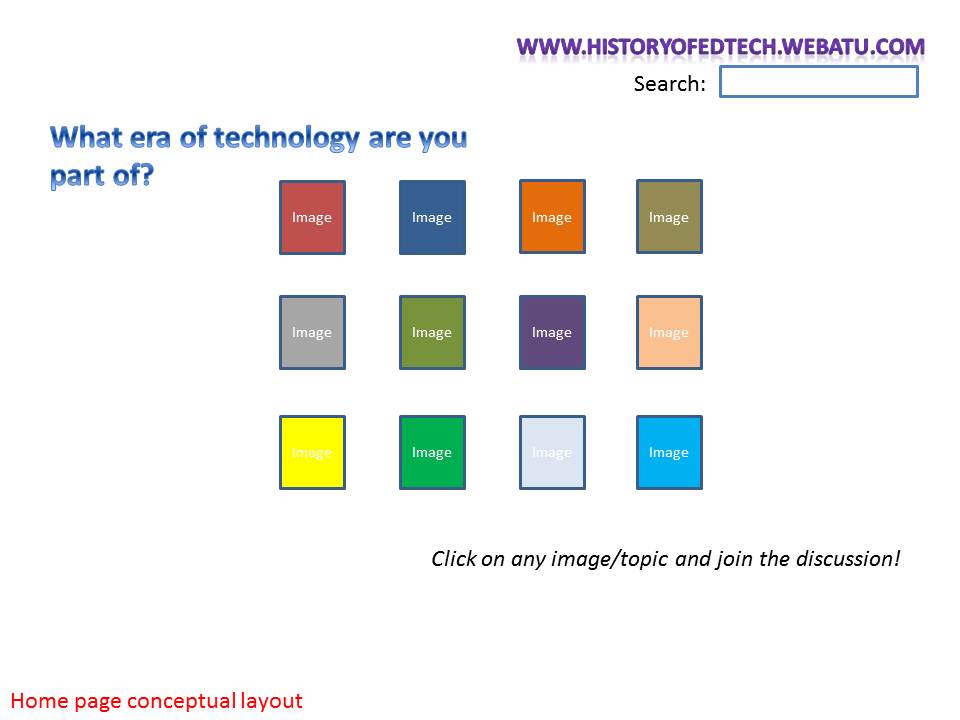
**Criteria:**

1. Knowledge seeking behavior = search feature, ask the oracle, navigation of collections
2. Community participation = ask the oracle, modifiable/wiki
3. Representation formats = text/narrative, image, video
4. Welcoming design w sense of identity = landing page (post card scripts)
5. Go live = overall quality of design and accuracy of content

**Mockup Layouts:**

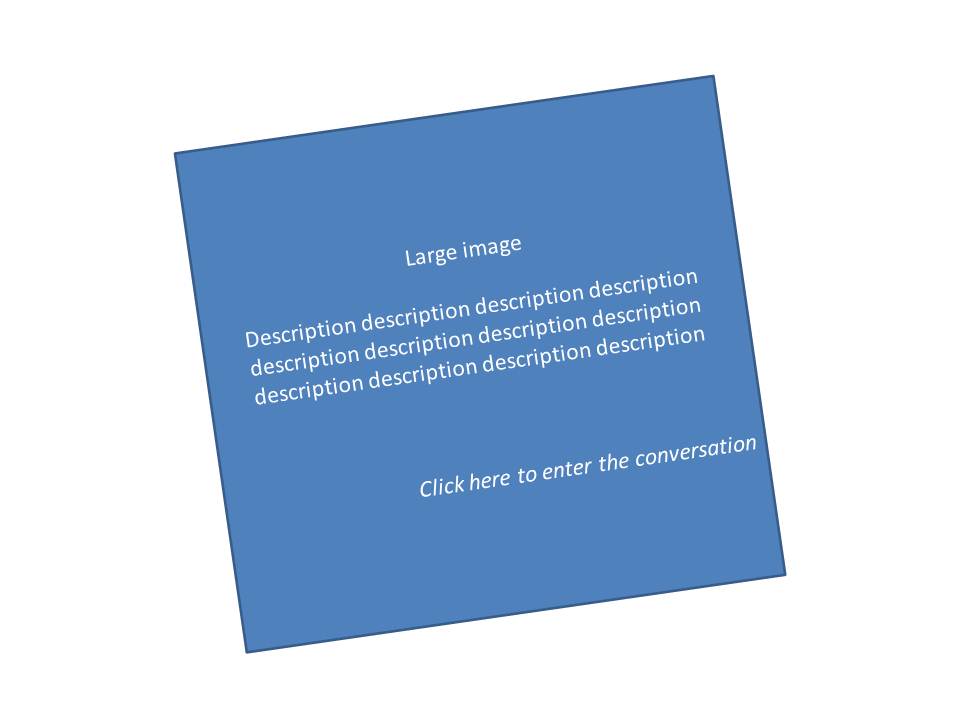
I think we should return to “history of personal computing”. The reason I suggest this is that it may be easier content to start with and demonstrate participation. However, “what if” Linda has us publish these live? In which case it would be far more interesting to go over “future predictions” in discussion.

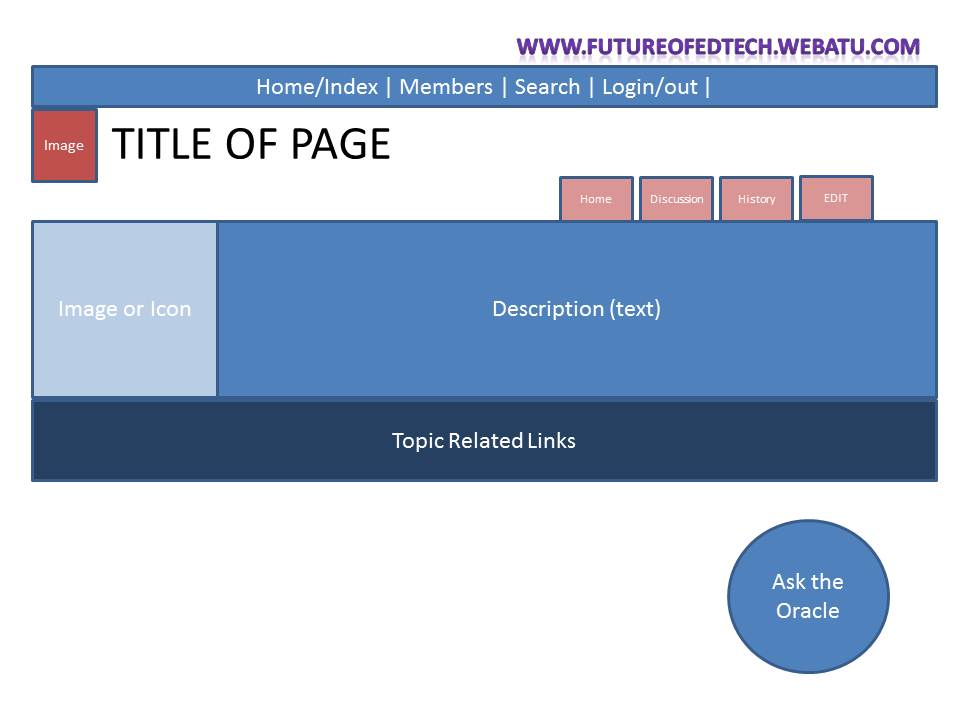
I also was thinking about the experiential nature of knowledge creation. In our first project, part of my analysis, that is something I identified as integral to coming to know something rather that knowing about it. Of course, many of the collection items we identified do not easily lend themselves to this. I played with just “augmented reality” you can look at it here is the link: (<http://augmentedrealitycollection.wikispaces.com/>) One thing that AR allows for in creating an experience through the use of demonstrations. So the participant moves from descriptions (text), to research (more text but as research), to illustrations (video), and finally to demonstrations where the participant can try. I think it is part of the first-person experience that contextualizes AR.



The home page is simple interface to peak curiosity and engage participation. The 10 to 12 images will be iconic representations of that category and subsequent conversation and content.

Once an icon is clicked on it will enlarge with a small description and link to participation.





Content pages will be the main body of knowledge and form of participation. Members can edit and build upon topics. They can enter discussion within this topic area or “ask the oracle” a question? Oracle questions are fielded by the site managers.

Membership registration will be necessary for the tracking of participation and the credibility of the content.



**Analysis/Monolog for guided tour:**

Our group discussions focused on a number of key design elements. We grouped them as: theoretic framework and purpose; social aspect of the community, that there is an identity and sense of relationship; how to initiate a community of practice in meaningful conversation; and content and context.

We believe the social aspects of member identity, group identity, and legitimate peripheral participation are instrumental in our design. Our own experience of this project has probably been a better example of a community of practice than our finished prototype. That is because our transactions negotiating, searching, designing and building have presented a superstructure within which we have operated. Our prototype is somewhat empty; the participation is so far, us. We have not introduced it to a group to examine how the prototype will perform. So our assumption is that the member profile page and discussion threads would act as a means for mediating the digital identity of the group within the context of the prototype. As we found with the Ravelry and Wikipedians examples member identity is not simply a function of the member profile, but also the history of contributions any one member makes, the quality and pragmatic usefulness of their contributions, and how well aligned they are with the stated purpose of the community.

The purpose of our prototype site is to form a knowledge-building community around the uses of technologies in educational contexts. The artifacts and conversation may include past or present technologies as a basis for creating a shared understanding towards a future design or implementation. Artifacts may be any kind of digital media used to represent a discrete topic, area of interest, thing, or concept. Diagrams may be used to illustrate interaction, process flow or decision making. Knowledge may be represented as text, audio, video or links that are used to explain and describe an artifact or concept. The target audiences are educators and those with interests in the process of teaching and learning. We do envision the audience being open with intention of drawing in various perspectives and expertise. The only think we would want to enforce is honest representation of members’ identity. We believe that is an essential component to building trust and credibility of the site.

Carrying our assumption forward, it is the connections that result from member participation through meaningful contributions that provide the basis of knowledge building. The members actively share experience based knowledge as a response to their practical work. In our personal experience of this project we already know, trust and share a common purpose so that distributed work is possible for us. New members will take time to achieve this. Likely they will first come to the prototype site because they are seeking meaningful information that has immediate value. Within our collection we provide the initial artifacts to do this. Members can add, edit and leave comments and questions behind. Community is fostered through the connections formed by interaction of the participants in building a body of knowledge. An initial set of content will be loaded to illustrate and set example for the community to initiate.

Our landing page or splash page provides a visual overview of the collection of content to be found within the site. The iconic images were carefully selected for their representation and associated meaning. Consideration was also made of each image as a part of a collage. A picture is worth a thousand words; seeing a group of interrelated images tells a story. Our intent is that the purpose of this site is evident at the entry point. The navigation between the images provides a quick and appealing means of surveying the entire collection.

Due to our own technical limitations the backend of the site is based on Wikispaces.com. Selecting an image from the splash page brings up a short caption and link to that section within the FutureOfEdTech wiki. The Wikispaces.com site also requires a participant to register, allowing for participants to edit and post in discussions. Once a participant enters a particular topic within the collection, they are presented with multiple artifacts representing that topic. Through basic hyperlinking the participant can move freely among various media formats. The artifacts help frame the concept behind the topic. The intention is to draw them into the discussion thread with a predetermined conceptualization of the topic as a starting point. We have simulated postings with the assumption the founding members would be responsible for monitoring the site and making responses or instigating discussions.

Curating a collection has been a challenging project. As we explored various aspects of the initial collection and design we entered an iterative process of reframing our purpose and collection. It became a very lively process of reflection, exploration, and either reconfirming or ejecting artifacts…..[need some kind of closure, but I’m drying up. Help?]